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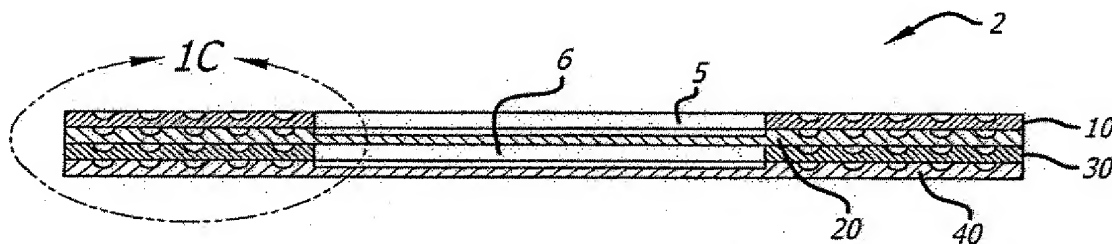
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(54) Title: **MODULAR REFORMER WITH ENHANCED HEAT RECUPERATION**



(57) Abstract: A thermal reformer system (1) is provided that comprises a planar assembly including a reformer zone (5), a com-
bustion zone (6), and various inlet and outlet manifolds with associated fluid flow passages (11, 20). The reformer system further
comprises an inlet combustion fluid flow passage (31) connecting an inlet combustion fluid manifold (30) and the combustion zone
(6), and an outlet combustion fluid flow passage (41) connecting the combustion zone (6) and the outlet combustion fluid manifold
(40). In the thermal reformer system the heat transfer and recuperation from outlet fluid flows is efficiently transferred to inlet fluid
flows, in order to minimize heat loss and insulation requirements.

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